

SUPER CRIB

**A PRODUCT OF GLOBAL GAMING
JON ADAMS & CRAIG TROUP,
OWNERS**

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RULES OF PLAY

GENERAL RULES

1. Super Crib is a casino game that is derived **from cribbage**.
2. The game is played on a layout of six spots, using one standard 52-card deck and is dealt from a **shuffle** machine by a house dealer.
3. Minimum and **maximum** bets are posted at the table.
4. Multiple hands may be played, but only at the discretion of each individual house.
5. Players will make a HAND wager and an optional **BONUS** wager.
6. The dealer will deal each player three cards, **face** down. The dealer will then deal himself three cards, face down.
7. The crib will be dealt two cards. After the **shuffler has** verified it to be a live hand, the dealer will expose his hand and players will be given time to examine their hands. Players will be given the choice to play their hand or fold. They will play their hand by placing a second bet, equal to their hand wager, on top of their cards. Folding their hand forfeits their original HAND wager, **as well as** any optional **BONUS** wager.
8. After **all** players have decided whether to play their hand or to fold, the dealer will expose the Crib. The Crib consists of two community cards, which complete **all** five-card cribbage hands.
9. The dealer will count the point total of his **hand**, announce it to the table, and then place the appropriate point button on the layout. The dealer's hand consists of **his/her** three individual cards, as well as the two cards in the crib.
10. The player's hands will then be opened in the center of the layout and counted by the dealer. The player's hand consists of his three individual cards, as well as the two cards in the crib. If the player's point total is greater than the dealer's, the HAND wager will be paid even money. If the player's point total is less than or equal to the dealer's, the HAND wager is lost.
11. The optional and independent side-bet **BONUS** wager will **be** paid upon completion of the HAND wager. The **BONUS** wager will be paid **according** to the pay scale accepted by each individual house.

CARDS

1. The game is played with a standard 52-card deck and is dealt **from** a **shuffle** machine.
2. The back of each card in the deck will be identical to **all** other cards in the deck. No one card will be differentiated from another **card** based on markings or symbols its back.

WAGER LIMITS

1. The wager limits for Super Crib are \$2 to \$100.
2. Wager limits for the BONUS are \$1 to \$100.
3. A maximum aggregate may be imposed at the house's discretion.
4. These limits may be changed upon the house's discretion, so long as they do not go beyond permissible limits set by the Washington State Gambling Commission.

MODIFIED CRIBBAGE SCORING

1. Hands will be counted using the following scale:

Combination of cards totaling 15	=	2 points
Any pair	=	2 points
Three of a kind	=	6 points
Four of a kind	=	12 points
Flush of five cards	=	5 points
Run of three or more	=	1 point for each card in run

Note: **Runs** can be counted as any three consecutive cards, Ace (low) through King (high). The Ace can only be played low. Therefore, Queen-King-Ace is not to be counted as a **run**.

2. Bonuses will be paid by one of the accepted pay scales. Each house will determine which scale they will use. Accepted pay scales are listed on the following pages. Any time the Jack of Spades is one of the two cards located in the Crib, **all** bonus pay outs will be doubled.

SPECIFIC EXAMPLES OF HANDS

EXAMPLES OF COUNTING USING MODIFIED CFUBBAGE SCORING

Example hand #1.

6♣ 7♥ 7♦ 8♥ 8♠

This hand is worth 24 points.

Combinations of 15 = 8 points

7♥8♥, 7♥8♠, 7♦8♥, 7♦8♠

Pairs = 4 points

7♥7♦, 8♥8♠

Runs = 12 points

6♣ 7♥ 8♥, 6♣ 7♥ 8♠, 6♣ 7♦ 8♥, 6♣ 7♦ 8♠

Example hand #2.

J♠ J♥ J♦ Q♦ 2♥

This hand is worth 6 points.

Three of a kind = 6 points

J♠ J♥ J♦

Example hand #3.

7♣ 7♦ 7♥ 7♠ K♠

This hand is worth 12 points.

Four of a kind = 12 points

7♣ 7♦ 7♥ 7♠

Example hand #4.

2♦ 4♦ 5♦ 10♦ Q♦

This hand is worth 9 points.

Combinations of 15 = 4 points

5♦10♦, 5♦Q♦

Flush = 5 points

2♦ 4♦ 5♦ 10♦ Q♦

EXAMPLES OF HAND WAGER

	HAND 1	HAND2	HAND 3	HAND4
PLAYER'S 3 CARDS	K♣ 6♦ 5♥	Q♠ 10♦ 6♥	2♦7♦ 9♠	K♣ 10♦ 3♠
CRIB	8♦ 2♥	8♥ 7♦	J♦ 10♥	5♦ 5♥
DEALER'S 3 CARDS	K♦ 7♦ 7♥	J♠ 10♥ 3♣	Q♦ 6♠ 3♥	Q♦ J♦ 7♥
PLAYER'S SCORE	4 PTS (2 15's)	5 PTS (1 15 & 1 RUN OF 3)	3 PTS (RUN OF 3)	10 PTS (4 15's & PAIR)
DEALER'S SCORE	6 PTS (2 15's & PAIR)	2 PTS (1 15)	3 PTS (RUN OF 3)	10 PTS (4 15's & PAIR)
RESULT	HOUSE WIN	PLAYER WIN	HOUSE WIN	HOUSE WIN

EXAMPLES OF BONUS WAGER

	HAND1	HAND2	HAND3
PLAYER'S 3 CARDS	9♥ 7♣ 2 ♦	8♦ 7♥ 6♥	J♦ 10♣ 5♥
CRIB	J♠ 10♦	8♥ 7♦	Q♥ J♠
POINTS	3 POINTS (RUN OF 3)	24 POINTS (4 15's, 2 PAIR, & 4 RUNS OF 3)	16 POINTS (4 15's, PAIR, & 2 RUNS OF 3)
PAY OUT (USING SCALE C)	LOST BONUS WAGER	100-1	10-1 (5-1 DOUBLED WITH J♠ IN CRIB)

SCHEDULES OF PAYOUT ODDS**SCALE A** 20.35% House Edge 26.88% Occurrence Rate

Points	Odds	Odds with J♠ in Crib
0	1 to 1	2 to 1
8-10	1 to 1	2 to 1
11-13	2 to 1	4 to 1
14-18	10 to 1	20 to 1
20-23	25 to 1	50 to 1
24	250 to 1	500 to 1
28	1000 to 1	2000 to 1

SCALE B 17.55% House Edge 18.25% Occurrence Rate

Points	Odds	Odds with J♠ in Crib
8-10	2 to 1	4 to 1
11-14	3 to 1	6 to 1
15-17	10 to 1	20 to 1
18-23	30 to 1	60 to 1
24	500 to 1	1000 to 1
28	1000 to 1	2000 to 1

SCALE C 22.84% House Edge 32.21% Occurrence Rate

Points	Odds	Odds with J♠ in Crib
0	1 to 1	2 to 1
7-10	1 to 1	2 to 1
11-14	2 to 1	4 to 1
15-17	5 to 1	10 to 1
18-21	20 to 1	40 to 1
22-24	100 to 1	200 to 1
28	500 to 1	1000 to 1

DEALING PROCEDURES

CARD DELIVERY AND PLACEMENT

1. At the beginning of each hand, the dealer **will** ask for all HAND and BONUS bets. After all bets have been placed, the dealer will deliver each player a hand consisting of three cards. The dealer will begin at **his/her** immediate **left** and continue **counter-clockwise**. The cards **will** be placed in the designated area, face down, directly between the player and their wagers.
2. The dealer will then place his three cards in the designated area, face down.
3. The CRIB will be dealt **last**. Three cards are to be placed in the center of the layout, next to the area designated as the CRIB. The top two cards will be slid into the CRIB. The bottom card will then be burnt.
4. After the **shuffler has** counted **all** the cards and the hand is **verified** as live, the dealer **will** expose **his** hand. Players will be allowed to examine their hand and decide if they want to play.
5. Players must either fold their hand or play it by placing a bet equal to the HAND wager on top of their hand in the area designated for their cards. Folding a hand forfeits both the original HAND wager and any BONUS wager. The dealer will first collect all wagers **from** a folded hand, and then collect the cards.
6. After **all** hands have been either folded or played, the dealer will expose the crib. The dealer will then count the total of his hand and announce its total to the table. The point total will be displayed by placing the appropriate button on the layout next to the dealer's hand.

PAY AND TAKE PROCEDURES

1. Once the dealer's point total is **determined**, the dealer will begin checking the player's hands. Beginning on the dealer's immediate right, and continuing clockwise, each hand will be exposed. The hand will be brought to the center of **the** layout, directly above the CRIB. The dealer will count the hand and announce it to the player. The player and the dealer should agree on the point total of that player's hand.
2. If the player's point total is greater than the dealer's point total, the HAND wager will be paid even money.
3. If the player's point total is less than or equal to the dealer's point total, the HAND wager is lost and will be placed in the rack.
4. If the player made the optional BONUS wager, the dealer will pay or take it according to the accepted pay scale.
5. If a player is to receive a bonus payout of \$100 or more, the dealer must have an approval **from** a Pit Supervisor before the player is paid.

CONCLUDING THE HAND

1. After each player's wagers have been resolved, his hand will be placed into the discard rack.
2. After all wagers are resolved, the CRIB will be placed into the discard rack, followed by the dealer's three cards.
3. Should any hand need to be **verified**, the cards will be brought out of the discard rack, and will be in the following order: The dealer's hand, the CRIB, and then the player's hands beginning with the player on the dealer's immediate left.
4. Bets will be opened for the next hand, and cards will be loaded into the shuffler. At the discretion of the house, a **shuffle** procedure may be added before the cards are loaded into the **shuffler**.

DEALER TOKENS

1. Players **may** place a token bet for the dealer on the HAND wager **and/or** BONUS wager. Tokens are to be placed directly in **front** of the player's wagers.
2. Limits on both the token bet **and/or** payout on the BONUS wager for the dealer may be imposed at the discretion of the house.

IRREGULARITIES AND MISDEALS

1. **All** misdeals are to be declared "dead hands." Cards are to be collected and a new hand will begin. Misdeals include incorrect number of cards being delivered to players, the dealer or the crib. Any **malfunction** of the shuffler will also be declared a misdeal.
2. Any rules disputed in the course of play **shall** be settled by the Pit Supervisor or Manager. **All** such decisions are binding and **final**.
3. Management can make immaterial modifications to the rules set out above.

STATISTICAL EVALUATION

PROBABILITIES OF EACH POSSIBLE POINT OUTCOME

Points	Probability of Occurring	Approximate Odds	Cumulative Probability
0	0.086342	11 to 1	0.086342
2	0.236375	3 to 1	0.322717
3	0.025510	38 to 1	0.348227
4	0.232173	3 to 1	0.580400
5	0.041515	23 to 1	0.621915
6	0.142349	6 to 1	0.764264
7	0.053268	18 to 1	0.817532
8	0.090008	10 to 1	0.907540
9	0.023169	42 to 1	0.930709
10	0.028781	34 to 1	0.959490
11	0.001321	756 to 1	0.960811
12	0.024796	39 to 1	0.985607
13	0.000371	2694 to 1	0.985978
14	0.007038	141 to 1	0.993016
15	0.000449	2226 to 1	0.993465
16	0.004808	207 to 1	0.998273
17	0.000469	2131 to 1	0.998742
18	0.000114	8771 to 1	0.998856
20	0.000620	1612 to 1	0.999476
21	0.000172	5813 to 1	0.999648
22	0.000037	27026 to 1	0.999685
23	0.000025	39999 to 1	0.999710
24	0.000283	3533 to 1	0.999993
28	0.000006	166666 to 1	0.999999

*NOTE The point totals of 1, 19, 25, 26 and 27 are not mathematically possible. 28 is the highest possible point total.

HOUSE EDGE ON HAND WAGER

After running 500,000 computer trials, it was found that the dealer and the player will score the same point total **16.7%** of the time. By using the probability of each possible point outcome and the probability of the dealer and player tying, the percentages of all possible outcomes were determined.

POSSIBLE OUTCOMES	PERCENTAGE	RESULT
Dealer scores more than player	41.65%	House wins
Player scores more than dealer	41.65%	Player wins
Player and dealer tie	16.7%	House wins

The occurrence of one hand scoring more than the other is equal, so there is no statistical advantage for the player or the dealer in all non-ties. A tie **will** occur **16.7%** of the time, and in all instances of a tie, the house wins. Therefore, the house edge on the hand wager is **16.7%**

HOUSE EDGE ON BONUS WAGER

The overall house edge for the BONUS wager for each pay scale was determined in the following manner. First, the statistical house edge had to be determined for each possible point outcome in all instances where the **J♠** is not in the CRIB. This is determined by taking the probability of each possible point outcome occurring and multiplying it by its payout. Then the house edge was determined for each possible point outcome when the **J♠** is in the CRIB, by doubling all payouts. Because the **J♠** will appear in the CRIB once every **26** hands, the overall house edge for each possible point outcome could be determined. ~~This~~ was done by multiplying each edge without the **J♠** by **25/26** and adding it to **each** edge with the **J♠/26**. Then by totaling the overall edges for each outcome, the overall house edge for each pay scale was **determined**. Spreadsheets for each pay scale are on the following pages.

Probabilities For 5-Card Modified Scoring Point Totals

Pay Scale A - 20.35% House Edge

Points	Probability of Occurring	Pay Scale Without Jack of Spades	House Edge	Pay Scale With Jack of Spades	House Edge	Overall House Edge
0	0.086342	1	0.086342	2	0.172684	0.089663
2	0.236375	-1	-0.236375	-1	-0.236375	-0.236375
3	0.025510	-1	-0.025510	-1	-0.025510	-0.025510
4	0.232173	-1	-0.232173	-1	-0.232173	-0.232173
5	0.041515	-1	-0.041515	-1	-0.041515	-0.041515
6	0.142349	-1	-0.142349	-1	-0.142349	-0.142349
7	0.053268	-1	-0.053268	-1	-0.053268	-0.053268
8	0.090008	1	0.090008	2	0.180016	0.093470
9	0.023169	1	0.023169	2	0.046338	0.024060
10	0.028781	1	0.028781	2	0.057562	0.029888
11	0.001321	2	0.002642	4	0.005284	0.002744
12	0.024796	2	0.049592	4	0.099184	0.051499
13	0.000371	2	0.000742	4	0.001484	0.000771
14	0.007038	10	0.070380	20	0.140760	0.073087
15	0.000449	10	0.004490	20	0.008980	0.004663
16	0.004808	10	0.048080	20	0.096160	0.049929
17	0.000469	10	0.004690	20	0.009380	0.004870
18	0.000114	10	0.001140	20	0.002280	0.001184
20	0.000620	25	0.015500	50	0.031000	0.016096
21	0.000172	25	0.004300	50	0.008600	0.004465
22	0.000037	25	0.000925	50	0.001850	0.000961
23	0.000025	25	0.000625	50	0.001250	0.000649
24	0.000283	250	0.070750	500	0.141500	0.073471
28	0.000006	1000	0.006000	2000	0.012000	0.006231
						-0.203490

Probabilities For 5-Card Modified Scoring Point Totals

Pay Scale B - 17.55% House Edge

Points	Probability of Occurring	Pay Scale Without Jack of Spades	House Edge	Pay Scale With Jack of Spades	House Edge	Overall House Edge
0	0.086342	-1	-0.086342	-1	-0.086342	-0.086342
2	0.236375	-1	-0.236375	-1	-0.236375	-0.236375
3	0.025510	-1	-0.025510	-1	-0.025510	-0.025510
4	0.232173	-1	-0.232173	-1	-0.232173	-0.232173
5	0.041515	-1	-0.041515	-1	-0.041515	-0.041515
6	0.142349	-1	-0.142349	-1	-0.142349	-0.142349
7	0.053268	-1	-0.053268	-1	-0.053268	-0.053268
8	0.090008	2	0.180016	4	0.360032	0.186940
9	0.023169	2	0.046338	4	0.092676	0.048120
10	0.028781	2	0.057562	4	0.115124	0.059776
11	0.001321	3	0.003963	6	0.007926	0.004115
12	0.024796	3	0.074388	6	0.148776	0.077249
13	0.000371	3	0.001113	6	0.002226	0.001156
14	0.007038	3	0.021114	6	0.042228	0.021926
15	0.000449	10	0.004490	20	0.008980	0.004663
16	0.004808	10	0.048080	20	0.096160	0.049929
17	0.000469	10	0.004690	20	0.009380	0.004870
18	0.000114	30	0.003420	60	0.006840	0.003552
20	0.000620	30	0.018600	60	0.037200	0.019315
21	0.000172	30	0.005160	60	0.010320	0.005358
22	0.000037	30	0.001110	60	0.002220	0.001153
23	0.000025	30	0.000750	60	0.001500	0.000779
24	0.000283	500	0.141500	1000	0.283000	0.146942
28	0.000006	1000	0.006000	2000	0.012000	0.006231
						-0.175457

Probabilities For 5-Card Modified Scoring Point Totals

Pay Scale C - 22.84% House Edge

Points	Probability of Occurring	Pay Scale Without Jack of Spades	House Edge	Pay Scale With Jack of Spades	House Edge	Overall House Edge
0	0.086342	1	0.086342	2	0.172684	0.089663
2	0.236375	-1	-0.236375	-1	-0.236375	-0.236375
3	0.025510	-1	-0.025510	-1	-0.025510	-0.025510
4	0.232173	-1	-0.232173	-1	-0.232173	-0.232173
5	0.041515	-1	-0.041515	-1	-0.041515	-0.041515
6	0.142349	-1	-0.142349	-1	-0.142349	-0.142349
7	0.053268	1	0.053268	2	0.106536	0.055317
8	0.090008	1	0.090008	2	0.180016	0.093470
9	0.023169	1	0.023169	2	0.046338	0.024060
10	0.028781	1	0.028781	2	0.057562	0.029888
11	0.001321	2	0.002642	4	0.005284	0.002744
12	0.024796	2	0.049592	4	0.099184	0.051499
13	0.000371	2	0.000742	4	0.001484	0.000771
14	0.007038	2	0.014076	4	0.028152	0.014617
15	0.000449	5	0.002245	10	0.004490	0.002331
16	0.004808	5	0.024040	10	0.048080	0.024965
17	0.000469	5	0.002345	10	0.004690	0.002435
18	0.000114	20	0.002280	40	0.004560	0.002368
20	0.000620	20	0.012400	40	0.024800	0.012877
21	0.000172	20	0.003440	40	0.006880	0.003572
22	0.000037	100	0.003700	200	0.007400	0.003842
23	0.000025	100	0.002500	200	0.005000	0.002596
24	0.000283	100	0.028300	200	0.056600	0.029388
28	0.000006	500	0.003000	1000	0.006000	0.003115
						-0.228403

STATEMENTS FROM GLOBAL GAMING

STATEMENT OF AGREEMENT TO PAY COSTS

Global Gaming, the requester, agrees to pay all costs for shipment, inspection and incidental costs incurred by the Washington State Gambling Commission in connection with the examination and evaluation of the new game and equipment.

STATEMENT OF INTENT TO PATENT

Global Gaming **fully** intends to patent all aspects of Super Crib. We have **begun** the patent process with a patent search through Wells **St.John**. They may be contacted by telephone at (509) 624-4276, fax at (509) 838-3424, and online at www.wellsstiohn.com.

STATEMENT ABOUT PRODUCTION OF LAYOUT AND MATERIALS

Felt layouts as well as numbered lamers essential for the play of Super Crib are in production at Mr. Ed's Bingo and Casino Supply, Inc. Copies of the template used for production of the Super Crib layout are included and the layouts will be shipped directly as soon as they are completed. Mr. Ed's can be contacted at 1-800-562-0414.

LIST OF CONTACTS FOR SUPER CRIB

Contact for Mathematics and Statistical Evaluations

David Goering

Senior Lecturer of Mathematics, Eastern Washington University
(509) 359-6858

Contact for Production of Materials for Super Crib

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Contact for Patent Information

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SUPER CRIB LICENSE AGREEMENT

THIS **LICENSE AGREEMENT** is made the _____ day of _____, 20____, by and between _____ ("Licensee"), with its principal place of business at _____ and Global Gaming ("Licensor").

WHEREAS, Licensor is the developer, inventor and owner of all rights, title and interest in the invention entitled "Super Crib", pending issue of a United States Patent.

WHEREAS, **Licensee** desires to license Super Crib on the terms pursuant to the conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the parties hereto agree as follows:

1. Licensee agrees to pay a license fee of \$495.00 per game (**one** table) per month, on a month-to-month basis. The **license** fee is **due** and payable monthly, in advance for **each license** period (which is defined as one month) at the first of each month.

2. Licensee agrees to offer the game in the **form**, and **conduct of play** according to the rules, supplied by the Licensor. Licensee also **agrees** to use an approved Super Crib layout.

3. Licensee hereby acknowledges the validity of Licensor's full and exclusive rights in and to Super Crib, as well as Licensor's ownership thereof. **Licensee** shall not, except as provided in this Agreement, **acquire any** rights in **or** to Super Crib by reason of Licensee's use thereof and **Licensee** shall not attempt to obtain any trademark registrations for Super Crib. Licensee hereby waives and disclaims **any right to use** Super Crib beyond the limited rights specifically granted herein. Licensee shall take **such** actions and shall execute all documents as may be reasonably requested by **Licensor** at any time to record, perfect or establish Licensor's exclusive rights in and ownership of **Super Crib**.

4. Either party may terminate the Agreement in any calendar month by giving written **notice** to the other. If said notice is given on or **before the 15th** calendar day of a month, the termination is **effective** at the end of the current calendar month, otherwise termination is **effective** at the **end of the** ensuing calendar month.

5. Licensee shall supply the table upon **which** to play **the** licensed game, a standard **blackjack** table works **best**. Licensee shall **also** supply subsequent quantities of hand-out cards and numbered **lamers**.

6. Licensor shall make available a **Super Crib** layout, numbered **lamers** and an initial quantity of hand-out cards for each **game** that is licensed. If equipment requires replacement, **Licensee** shall pay for the replacement costs. Licensee is required to **keep** all equipment in **good** condition.

IN WITNESS **WHEREOF**, the parties have signed this Agreement **as set out below**.

Licensee

Global **Gaming** - Licensor

By: _____

By: _____

Name: _____

Name : Jon **Adams**

Title: _____

Title: **Owner**